

PATENT APPLICATION

Docket: 13768.221

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND  
INTERFERENCES

In re application of		)
		)
	Anthony John Goodacre, <i>et al</i>	)
		)
Serial No.:	10/010,190	)
		)
Filed:	December 5, 2001	)
		)
For:	Outputting Dynamic Local Content on Mobile Devices	)
		)
Examiner:	Cesar B. Paula	)
		)
Group Art Unit:	2178	)

BRIEF OF APPELLANTS

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

On March 13, 2007, Appellant timely filed a Notice of Appeal and Pre-appeal Brief Request for Review from the action of the Examiner finally rejecting claims 1-39 and 41-49 in this application. A Notice of Panel Decision from Pre-Appeal Brief Review was mailed on May 21, 2007. This appeal brief is being filed under the provisions of 37 C.F.R. § 41.37. The filing

fee of \$500.00, as set forth in 37 C.F.R. § 41.20(b)(2), is submitted herewith. This brief is being filed on July 20, 2007 with a Petition For Extension Of Time and the required fee under 37 C.F.R. § 1.136 and is therefore timely under 37 C.F.R. § 41.37(a)(1).

#### REAL PARTY IN INTEREST

The real party in interest is Microsoft Corporation, by way of assignment from Anthony John Goodacre, Barry Merrick, and David Hitchman who are the named inventors. The assignment documents were recorded at Reel No. 012373, Frame 0524 in the United States Patent and Trademark Office on December 5, 2001.

#### RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

#### STATUS OF CLAIMS

The application was originally filed with claims 1-44. Claim 40 was cancelled by Amendment "A" dated January 21, 2005. Claims 45-49 were added by Amendment "B" dated June 22, 2005. Pending claims 1-39 and 41-49 stand rejected and have been appealed.

#### STATUS OF AMENDMENTS

Amendments "A" through "E" have all been entered by the Examiner, and claims 1-39 and 41-49 are presented on appeal in the same form as that finally rejected by the Examiner.

#### SUMMARY OF INVENTION

The invention of the present application is generally directed to a method and computer program product for transporting updated dynamic content to a mobile computing device. More

specifically, a network computing device monitors dynamic content, such as stock quotes, sports scores, headlines, etc., and sends updated dynamic content to the mobile computing device for display when changes in the dynamic content are detected. Importantly, changes in the dynamic content are identified at the provider and “pushed” to the mobile device, thereby alleviating the need for the mobile device to continually “go and get” or “retrieve” the dynamic data. Thus, the invention avoids wasting bandwidth and resources like prior art methods that continually retrieve dynamic data regardless of whether the dynamic content has changed.

There are four independent claims: claims 1, 27, 41 and 43. Claim 1 is directed to a method from the perspective of a dynamic content provider for automatically transporting updated dynamic content to a mobile computing device. Claim 27 is directed to a method similar to claim 1, but is from the perspective of a mobile computing device receiving and displaying updated dynamic content from a provider. Claims 41 and 43 are computer program product claims corresponding to claims 1 and 27, respectively. The invention claimed by claims 1, 27, 41 and 43 will be summarized below.

#### **A. Claim 1**

1. (Previously Presented) A method of customizing arrangement of content displayed on a display device of a mobile computing device, the method comprising:

an act of creating a template file at a network computing device, which represents a layout for displaying content at the mobile computing device that is updated automatically and without user intervention, by performing the acts of:

generating static content and layout information corresponding to the static content;

generating one or more references to dynamic content and layout information corresponding to the one or more references to dynamic content, the dynamic content changing over time; and

including the static content, the one or more references to the dynamic content, as well as corresponding layout information in the template file;

an act of generating computer-executable instructions for substituting the dynamic content at the mobile computing device, the substituted dynamic content being stored separate from the template file and substituted for the one or more references to the dynamic content included in the template file;

an act of transferring the template file and the computer-executable instructions to the mobile computing device in order to customize arrangement of the dynamic content at the mobile computing device wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content, wherein the template file, including the layout information is stored at the mobile computing device; and

an act of monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content.

The method of claim 1 first recites creating a template at a network computing device.

The template file includes “static content,” “layout information,” and “references to displayable dynamic content.” [Specification, at p. 5, ¶ [0008].] The static content of the template “is content that will not change when displayed at a mobile device.” [*Id.* at p. 15, ¶ [0043].] The layout information of the template “defines how displayable dynamic content received by telephonic device 100 is displayed on a display device.” [*Id.* at p. 14, ¶ [0038].] The layout

information may include determining the location on a display device, font, font size, font color, manipulating graphics “or otherwise formatting raw static content so as to personalize for display to a user.” [*Id.* at p. 16, ¶ [0044].] The references to displayable dynamic content facilitate the display of updated dynamic content. [*Id.* at pp. 16-17, ¶ [0045].]

After generating a template, the method of claim 1 next recites the an act of generating computer-executable instructions at the networking computer for substituting dynamic content at the mobile computing device for the references to the dynamic content included in the template file. These computer executable instructions also “facilitate the substitution of actual updated displayable dynamic content for variables included in a template file.” [*Id.* at p. 20, ¶ [0057].]

The method of claim 1 next recites transferring the template and the computer-executable instructions to the mobile computing device. [Specification, at p. 21, ¶¶ [0057-0058], and act 205 in Fig. 2.] The template file, including the layout information, is stored at the mobile computing device. [*Id.* at p. 24, ¶ [0066], and act 301 in Fig. 3.] When executed, the computer-executable instructions “facilitate display of the current state of displayable dynamic content.” [*Id.* at p. 24, ¶ [0067], and act 304 in Fig. 3.]

Last, claim 1 recites monitoring content denoted in a registration. A registration may be simply a subscription to a service that provides dynamic content. [*Id.* at p. 5, ¶ [0008].] The registration identifies the dynamic content that a particular user desires to receive. [*Id.*] When the dynamic content of interest changes, the updated dynamic contented is transported to the mobile computing device and merged with template and the layout information corresponding to the reference for that dynamic content. [*Id.* at p. 5, ¶¶ [0009], [0067]-[0068], and act 304 of

Fig. 3.] Importantly, the dynamic content is *not retrieved* by the mobile computing device, but instead the network computing device “pushes” the updated dynamic content to mobile computing device, which merely *receives* the updated dynamic content. [See *id.* at p. 22, ¶ [0063] and communication link 154 in Fig. 1B.]

#### **B. Claim 27**

27. (Previously Presented) A method for displaying a customized arrangement of content at a mobile computing device, the method comprising:

- an act of receiving, from a network computing device, a template file that includes static content, one or more references to dynamic content, as well as corresponding layout information for the static and dynamic content;

- storing the template file and the layout information;

- an act of receiving, from the network computing device, computer-executable instructions for substituting the dynamic content for the one or more references to the dynamic content included in the template file;

- an act of receiving a notification that dynamic content referenced by at least one of the one or more references to the dynamic content has changed as a result of the network computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content;

- an act of executing computer-executable instructions to substitute the changed dynamic content at the mobile computing device, the changed dynamic content being stored separate from the template file and substituted for the at least one of the one or more references to the dynamic content, based on the notification that the dynamic content referenced by the at least one of the one or more references to the dynamic content has changed, wherein the computer-executable instructions are executed at the

mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

The method of claim 27 first recites receiving a template from a network computing device. The template file includes “static content,” “layout information,” and “references to displayable dynamic content.” [Specification, at p. 5, ¶ [0008].] The static content of the template “is content that will not change when displayed at a mobile device.” [*Id.* at p. 15, ¶ [0043].] The layout information of the template “defines how displayable dynamic content received by telephonic device 100 is displayed on a display device.” [*Id.* at p. 14, ¶ [0038].] The layout information may include determining the location on a display device, font, font size, font color, manipulating graphics “or otherwise formatting raw static content so as to personalize for display to a user.” [*Id.* at p. 16, ¶ [0044].] The references to displayable dynamic content facilitate the display of updated dynamic content. [*Id.* at pp. 16-17, ¶ [0045].]

After receiving the template, the method of claim 27 next recites the act of storing the template at the mobile computing device. [*Id.* at p. 24, ¶ [0066], and act 301 in Fig. 3.]

Claim 27 next recites receiving computer-executable instructions at the networking computer for substituting updated dynamic content at the mobile computing device for the references to the dynamic content contained in the template file. [*Id.* at p. 21, ¶¶ [0057-0058].] When executed, the computer-executable instructions “facilitate display of the current state of displayable dynamic content.” [*Id.* at p. 24, ¶ [0067], and act 304 in Fig. 3.]

The method of claim 27 next recites receiving a notification that dynamic content has changed. Specifically, the network computing device monitors the dynamic content denoted in a

registration. A registration may be simply a subscription to a service that provides dynamic content. [*Id.* at p. 5, ¶ [0008].] The registration identifies the dynamic content that a particular user desires to receive. [*Id.*] The changes in the dynamic content are transported to the mobile computing device and merged with the layout information corresponding to the reference for that dynamic content. [*Id.* at p. 5, ¶¶ [0009], [0067]-[0068], and act 304 of Fig. 3.] Here again, it is important to understand that the dynamic content is *not retrieved* by the mobile computing device, but instead is “pushed” to mobile computing device by the network computing device. [*See id.* at p. 22, ¶ [0063] and communication link 154 in Fig. 1B.] The mobile computing device merely *receives* the updated dynamic content. [*Id.*]

### C. Claim 41

41. (Previously Presented) A computer program product comprising one or more computer readable media with computer executable instructions for implementing a method of customizing arrangement of content displayed on a display device of a mobile computing device, the method comprising:

- creating a template file at a network computing device, which represents a layout for displaying content at the mobile computing device that is updated automatically and without user intervention, by:

- generating static content and layout information corresponding to the static content;

- generating one or more references to dynamic content and layout information corresponding to the one or more references to dynamic content, the dynamic content changing over time even if corresponding layout information remains the same;



including the static content, the one or more references to the dynamic content, as well as corresponding layout information in the template file;

generating computer-executable instructions for substituting the dynamic content at the mobile computing device, the substituted dynamic content being stored separate from the template file and substituted for the one or more references to the dynamic content included in the template file; wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

transferring the template file and the computer-executable instructions to the mobile computing device in order to customize arrangement of the dynamic content at the mobile computer device, wherein the template file, including the layout information is stored at the mobile computing device; and

monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content.

Claim 41 is virtually the same as claim 1 with the difference that claim 1 is a method claim and claim 41 is a computer program product claim for implementing the method of claim

1. The specification specifically identifies computer program products as one way to practice the invention claimed in the application. [Specification, at p. 9, ¶ [0024].]

The method performed by the computer program product of claim 41 first recites creating a template at a network computing device. The template file includes “static content,” “layout information,” and “references to displayable dynamic content.” [Specification, at p. 5, ¶ [0008].]

The static content of the template “is content that will not change when displayed at a mobile

device.” [*Id.* at p. 15, ¶ [0043].] The layout information of the template “defines how displayable dynamic content received by telephonic device 100 is displayed on a display device.” [*Id.* at p. 14, ¶ [0038].] The layout information may include determining the location on a display device, font, font size, font color, manipulating graphics “or otherwise formatting raw static content so as to personalize for display to a user.” [*Id.* at p. 16, ¶ [0044].] The references to displayable dynamic content facilitate the display of updated dynamic content. [*Id.* at pp. 16-17, ¶ [0045].]

After generating a template, the method performed by the computer program product of claim 41 next recites the an act of generating computer-executable instructions at the networking computer for substituting dynamic content at the mobile computing device for the references to the dynamic content included in the template file. These computer executable instructions “facilitate the substitution of actual updated displayable dynamic content for variables included in a template file.” [*Id.* at p. 20, ¶ [0057].]

The method performed by the computer program product of claim 41 next recites transferring the template and the computer-executable instructions to the mobile computing device. [Specification, at p. 21, ¶¶ [0057-0058], and act 205 in Fig. 2.] The template file, including the layout information, is stored at the mobile computing device. [*Id.* at p. 24, ¶ [0066], and act 301 in Fig. 3.] When executed, the computer-executable instructions “facilitate display of the current state of displayable dynamic content.” [*Id.* at p. 24, ¶ [0067], and act 304 in Fig. 3.]

Last, the method performed by the computer program product of claim 41 recites monitoring content denoted in a registration. A registration may be simply a subscription to a service that provides dynamic content. [*Id.* at p. 5, ¶ [0008].] The registration identifies the dynamic content that a particular user desires to receive. [*Id.*] When the dynamic content of interest changes, the network computing device transports the updated dynamic content to the mobile computing device, where it is merged with the layout information corresponding to the reference for that dynamic content. [*Id.* at p. 5, ¶¶ [0009], [0067]-[0068], and act 304 of Fig. 3.] Importantly, the dynamic content is ***not retrieved*** by the mobile computing device, but instead is “pushed” to mobile computing device by the network computing device. [*See id.* at p. 22, ¶ [0063] and communication link 154 in Fig. 1B.] The mobile computing device merely ***receives*** the updated dynamic content and displays the dynamic content according to the references. [*Id.*]

#### **D. Claim 43**

43. (Previously Presented) A computer program product comprising one or more computer readable media with computer executable instructions for implementing a method of displaying a customized arrangement of content at a mobile computing device, the method comprising:

receiving, from a network computing device, a template file that includes static content, one or more references to dynamic content, as well as corresponding layout information for the static and dynamic content;

receiving, from the network computing device, computer-executable instructions for substituting the dynamic content for the one or more references to the dynamic content included in the template file;

receiving a notification that dynamic content referenced by at least one of the one or more references to the dynamic content has changed as a result of the network

computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content;

executing computer-executable instructions to substitute the changed dynamic content at the mobile computing device, the changed dynamic content being stored separate from the template file and substituted for the at least one of the one or more references to the dynamic content, based on the notification that the dynamic content referenced by the at least one of the one or more references to the dynamic content has changed, wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

Claim 43 is virtually the same as claim 27 with the difference that claim 27 is a method claim and claim 43 is a computer program product claim for implementing the method of claim 27. The specification specifically identifies computer program products as one way to practice the invention claimed in the application. [Specification, at p. 9, ¶ [0024].]

The method performed by the computer program product of claim 43 first recites receiving a template from a network computing device. The template file includes “static content,” “layout information,” and “references to displayable dynamic content.” [Specification, at p. 5, ¶ [0008].] The static content of the template “is content that will not change when displayed at a mobile device.” [*Id.* at p. 15, ¶ [0043].] The layout information of the template “defines how displayable dynamic content received by telephonic device 100 is displayed on a display device.” [*Id.* at p. 14, ¶ [0038].] The layout information may include determining the

location on a display device, font, font size, font color, manipulating graphics “or otherwise formatting raw static content so as to personalize for display to a user.” [*Id.* at p. 16, ¶ [0044].] The references to displayable dynamic content facilitate the display of updated dynamic content. [*Id.* at pp. 16-17, ¶ [0045].]

After receiving a template, the method performed by the computer program product of claim 43 next recites the act of storing the template at the mobile computing device. [*Id.* at p. 24, ¶ [0066], and act 301 in Fig. 3.]

The method performed by the computer program product of claim 43 next recites receiving computer-executable instructions at the networking computer for substituting dynamic content at the mobile computing device for the references to the dynamic content included in the template file. [*Id.* at p. 21, ¶¶ [0057-0058].] When executed, the computer-executable instructions “facilitate display of the current state of displayable dynamic content.” [*Id.* at p. 24, ¶ [0067], and act 304 in Fig. 3.]

Last, the method performed by the computer program product of claim 43 recites receiving a notification that dynamic content has changed. Specifically, the network computing device monitors dynamic content denoted in a registration. A registration may be simply a subscription to a service indicating the dynamic content that a particular user desires to receive. [*Id.* at p. 5, ¶ [0008].] Importantly, the dynamic content is *not retrieved* by the mobile computing device, but instead is “pushed” to mobile computing device by the network computing device. [*See id.* at p. 22, ¶ [0063] and communication link 154 in Fig. 1B.] The

mobile computing device merely *receives* the updated dynamic content and displays the dynamic content according to the references. [*Id.*]

GROUND FOR REJECTION TO BE REVIEWED ON APPEAL

1. The Examiner's rejection of claims 1-14, 17-19, 24-39, 41-46 and 48 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pub. No. 2003/0046365 A1, 3/6/2003 filed on 9/4/2001 ("Pfister"), in view of U.S. Pat. No. 5,987,480 ("Donohue"), in further view of U.S. Pat. No. 6,023,714 ("Hill"), and further in view of U.S. Pat. No. 5,835,914 ("Brim").

2. The Examiner's rejection of claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Pfister, in view of Donohue, further in view of Hill, and further in view of U.S. Pub. No. 2004/0015476 A1, 1/22/2004, PCT filed on 8/31/2001 ("Twaddle"), and further in view of Brim.

3. The Examiner's rejection of claims 16 and 20-23 under 35 U.S.C. § 103(a) as being unpatentable over Pfister, in view of Donohue, further in view of Hill, and further in view of U.S. Pub. No. 2003/0061106 A1, 3/27/2003, filed on 9/21/2001 ("Orhormuru"), and further in view of Brim.

4. The Examiner's rejection of claims 47 and 49 under 35 U.S.C. § 103(a) as being unpatentable over Pfister, in view of Donohue, further in view of Hill, and further in view of U.S. Pub. No. 2003/0126136 A1, 7/3/2003, provisional application filed on 6/22/2001 ("Omoigui"), and further in view of Brim.

## ISSUES

1. Whether the Examiner erred in citing Brim as teaching “monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device.”

## ARGUMENT

The Examiner has rejected claims 1-39 and 41-49 under 35 U.S.C. § 103(a). Each of these claims contains the limitation “the network computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device.”<sup>1</sup> In rejecting of each of the claims under 35 U.S.C. § 103 (a), the Examiner has erroneously recited Brim as teaching this limitation. The Examiner has conceded that no other cited art reference of record teaches this limitation. As established below, Brim does not teach monitoring dynamic content for changes at the network computing device and, when changes are detected, sending updated dynamic content to the mobile computing device. Instead, Brim teaches a computing device that *retrieves* dynamic information from a network computing device, without regard to whether the dynamic information has changed. Thus, the approach of Brim is the very antithesis of the limitations in each of the claims in the present application.

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<sup>1</sup> Claims 1 and 41 recite the similar limitation of “monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device.” However, for purposes of the arguments made in this Appeal, these limitations of claims 1, 27, 41 and 43 are not materially different.

**A. The Examiner Has Not Established a *Prima Facie* Case of Obviousness for Claims 1-39 and 41-49**

1. Claims 1-39 and 41-49 Each Require Monitoring Dynamic Content Denoted by a Registration at the Network Computing Device and When Dynamic Content of Interest Changes, Transporting the Updated Dynamic Content to the Mobile Computing Device.

As discussed above, independent claims 1, 27, 41 and 43, and the claims depending therefrom, each require that “the network computing device monitor[] content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device.” This limitation requires at least 1) a registration that denotes dynamic content, 2) monitoring the dynamic content at the network computing device, 3) when the dynamic content denoted by the registration changes, sending the changed dynamic content to the mobile computing device. Each of these limitations serves to increase the efficiency with which dynamic content is provided to a user of a mobile computing device.

For example, suppose that a service for a cell phone offers the user the ability to receive the following dynamic content: 1) the price of GM’s stock, 2) the score of the NFL Super Bowl, and 3) world news headlines. Further suppose that the user submits a registration to receive the score of the NFL Super Bowl. In other words, the user does not register to receive dynamic information about GM’s stock price or about world news headlines because the user is only interested in the score of the NFL Super Bowl. By only sending the dynamic content to the cell phone for which the user has registered, *i.e.* the score of the Super Bowl, the invention uses less bandwidth and resources than if the dynamic information of each category was transmitted to the user.



The invention further saves bandwidth and other resources by only sending the score of the Super Bowl when changes in the score occur. Continuing the hypothetical, suppose that the score of the Super Bowl changes seven times during the four-hour game. Because the network computing device monitors the score and only sends the score to the cell phone when the score changes, the invention will send the score to the cell phone only seven times in four hours. Despite the relatively few transmissions of the score to the cell phone, the dynamic score on the cell phone is continuously up to date because it is sent when the score changes.

These features and advantages of the present invention are not found in the cited art, as explained below.

2. The Cited Art of Record Does Not Teach Monitoring Dynamic Content Denoted by a Registration at the Network Computing Device and When Dynamic Content of Interest Changes, Transporting the Updated Dynamic Content to the Mobile Computing Device as Required by the Claims

First, the Examiner expressly admits that the Applicant's amendment adding the limitation "the network computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device" overcame the previous rejections under 35 U.S.C. § 103(a) based on Pfister, Donohue, Hill, Twaddle, Orhormuru, and Omoigui. [Office Action dated November 13, 2006, at pp. 2-3, ¶¶ 3-6.] The Examiner also explicitly admits that "Pfister fails to explicitly disclose: *monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to*

*dynamic content.*” [Id. at pp. 6-7 (emphasis in original).] Having conceded that none of these references teach this limitation, the Examiner fails to specifically identify this limitation in any other reference of record.

*i. The Examiner Has Not Cited Any Reference Denoting Dynamic Content by a Registration as Required by the Claims*

As set forth above, each of the claims requires that dynamic content be denoted by a registration. The Examiner, however, has not argued that this limitation of the claims is found in any cited art reference of record. After explicitly conceding that Pfister does not contain this limitation, the Examiner simply argues that “Brim teaches using ActiveX controls to display current information – *dynamically* –, such as stock prices, on a web page. The dynamic data is continuously retrieved from a remote server and updated on a location of the web page on a client web browser (col. 1, lines 21-50).” [11/13/06 Office Action, at p. 7.]<sup>2</sup> This citation and argument by the Examiner does not address whether Brim teaches denoting dynamic content with a registration. Indeed, nowhere does the Examiner argue that Brim, or any other reference, teaches denoting dynamic content by a registration, as required by the claims. Thus, the Examiner has failed to establish even a *prima facie* case of obviousness.

*ii. The Examiner Has Not Cited Any Reference Teaching Monitoring Dynamic Content at the Network Computing Device*

As set forth above, each of the claims requires monitoring dynamic content at the network computing device. Again, the Examiner has not argued that this limitation of the claims is found in any cited art reference of record. Similar to the limitation denoting dynamic content

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<sup>2</sup> This citation by the Examiner to Brim is specifically analyzed below in section A3.

in a registration, the Examiner explicitly states that Pfister does not monitor dynamic content at the network computing device, and then fails to point to any reference teaching this limitation. Instead, the Examiner simply argues that Brim teaches displaying information “dynamically.” [11/13/06 Office Action at pp. 6-7.] Displaying information “dynamically” does not teach, either explicitly, implicitly or inherently, that the network computing device monitors the dynamic content for changes. Because the Examiner has not cited any prior art reference teaching monitoring dynamic content at the network computing device, the Examiner’s rejections of the claims for obviousness should respectfully be removed.

*iii. The Examiner Has Not Cited Any Reference Teaching “When Dynamic Content of Interest Changes, the Dynamic Content Is Transported to the Mobile Computing Device” as Required by the Claims*

As set forth above, each of the claims require that “when dynamic content of interest changes, the dynamic content is transported to the mobile computing device.” The Examiner has not argued that this limitation of the claims is found in any reference of record. Here again, the Examiner explicitly states that Pfister does not teach this limitation, and then fails to point to any reference that teaches this limitation. Instead, the Examiner simply argues that Brim teaches displaying information “dynamically.” [11/13/06 Office Action at pp. 6-7.] Because the Examiner has not cited any prior art reference teaching that “when dynamic content of interest changes, the dynamic content is transported to the mobile computing device,” the Examiner has failed to establish a *prima facie* case of obviousness.

3. Brim Does Not Teach Monitoring Dynamic Content Denoted by a Registration at the Network Computing Device and When Dynamic Content of Interest Changes, Transporting the Updated Dynamic Content to the Mobile Computing Device as Required by the Claims

As explained above, the Examiner concedes that none of Pfister, Donohue, Hill, Twaddle, Orhormuru, and Omoigui teach “monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content.” [See 11/13/06 Office Action at pp. 2-3 and 6-7.] Having conceded that none of these references teach this limitation, the Examiner formulated new rejections for each of the claims under 35 U.S.C. § 103(a), citing to Brim as teaching this limitation. The Examiner’s citation to Brim, however, is not only inadequate to establish a *prima facie* obviousness rejection, it is also mistaken, as explained below.

i. *Teachings of the Brim Reference*

The invention of Brim is directed to a “Method for Preserving and Reusing Software Objects Associated with Web Pages.” [Brim, at Title.] Web pages accessed over the Internet can contain program code that is downloaded. [*Id.* at 1:22-27.] This program code defines software components that are executed while the web page is being viewed with a browser program. [*Id.*] “The software components provide interactive, dynamic content in Web pages. The components may establish and maintain interactive sessions between a user and remote computers, display animation, or present regularly updated information.” [*Id.* at 1:27-31.] The standard interface for the software components is referred to as “ActiveX, and the software

components that are compliant with ActiveX are referred to as ActiveX controls. For example, a Stock Ticker ActiveX control can display current stock prices that are continuously scrolled across a defined area within a Web page that is displayed by a Web browser.” [*Id.* at 1:32-39.]

Brim explains that “when a user exits a Web page, the Web browser destroys the ActiveX controls contained therein. If the user later returns to a previously viewed Web page, the Web browser must create a new set of ActiveX controls.” [*Id.* at 1:44-48.] The invention of Brim is intended to “eliminate the need to recreate a control [such as an ActiveX control] each time a Web page is accessed[.]” [*Id.* at 1:66-67.] In other words, Brim “is a method of controlling the existence of a software component [such as an ActiveX control] that is associated with a Web page in order to reuse the software component when the corresponding Web page is revisited.” [*Id.* at 2:11-14.]

In order to preserve the controls created during an initial visit to a Web page, the invention of Brim “provides a naming control and class factory object.” [*Id.* at 2:14-15.] When a browser receives a command from a Web page to create a control, the naming control provides a unique name or identifier to the control so that the class factory object can locate the control in the future. [*See id.* at 7:27-29.] The invention keeps a “control list” of all the controls that have been created, along with corresponding references to each control. [*Id.* at 8:8-13.] Thus, when a user visits a Web page with a command to create a control, the “factory object receives the command and determines whether the desired control has been previously created and remains in existence.” [*Id.* at 2:16-23.] “If the desired control exists, the class factory returns a reference to

the control without creating a new control. If the desired control does not exist, the class factory creates the desired control, returning a reference to the newly created control.” [*Id.* at 2:22-26.]

Brim also prevents the destruction of previously created controls when a Web page is exited. “When a control is created, the class factory increments a reference count corresponding to the control. Incrementing the reference count prevents the reference count from decremented to zero, thereby preventing the destruction of the control when the Web browser exits from a Web page.” [*Id.* at 2:35-42.]

Thus, Brim teaches a system and method for preserving controls, such as ActiveX controls, so that a computer does not need to recreate those controls upon revisiting a Web page.

*ii. The Examiner’s Citation of Brim as Teaching Monitoring Dynamic Content Denoted by a Registration at the Network Computing Device and When Dynamic Content of Interest Changes, Transporting the Updated Dynamic Content to the Mobile Computing Device as Required by the Claims Is Inadequate*

After conceding that Pfister does not teach “monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content,” the Examiner states the following:

However, Brim teaches using ActiveX controls to display current information – dynamically –, such as stock prices, on a web page. The dynamic data is ***continuously retrieved*** from a remote server and updated on a location of the web page on a client web browser (col. 1, lines 21-50). It would have been obvious to a person of ordinary skill in the art at the time of the invention to transfer to the client the web page including the script by combining Pfister, and Brim, because

of all the reasons taught by Brim, not excluding the *continuous retrieval*, and display of dynamic data (col. 2, lines 1-11), which would provide the benefit of quickly, and efficiently *retrieve* [sic] dynamic data onto a client computer.

[11/13/06 Office Action, at p. 7 (emphasis added).] Thus, the only features identified in Brim by the Examiner are those of displaying information dynamically, and a client computer “retrieving” the dynamic data from a remote server. The Examiner does not argue that Brim teaches 1) denoting dynamic content by a registration, 2) monitoring dynamic data at a networking computer, or 3) when dynamic content of interest changes, the dynamic content is transported to the mobile computing device. Because the Examiner fails to identify any teaching of these three limitations in Brim, or any other reference of record, the Examiner’s has failed to establish a *prima facie* case of obviousness.

Not only has the Examiner failed to identify these limitations in Brim, Brim does not teach any of these limitations. The Examiner’s citations of Brim at column 1, lines 21-50 and column 2, lines 1-11 simply set forth the background of the invention. Each of the passages in these citations discussing dynamic information is quoted below:

The *software components provide interactive, dynamic content in Web pages*. The components may establish and maintain interactive sessions between a user and remote computers, display animation, or present regularly updated information. [Brim, at 1:27-32 (emphasis added).]

For example, *a Stock Ticker ActiveX control can display current stock prices* that are continuously scrolled across a defined area with a Web page that is displayed by a Web browser. [*Id.* at 1:37-40 (emphasis added).]

In addition to *displaying static and dynamic information* in a Web page, Web browsers and Web servers provide the capability for users to navigate among numerous Web pages along with the capability of returning to a previously viewed Web page. [*Id.* at 1:41-45 (emphasis added).]

*For controls like the Stock Ticker described above, this [i.e. destroying the control upon exiting the Web page] is acceptable because a Stock Ticker control needs only to **continually retrieve** the latest stock prices and display them.” [Id. at 1:48-51 (emphasis added).]*

Not one of these passages teach the limitations of the claims requiring 1) denoting dynamic content by a registration, 2) monitoring dynamic data at a networking computer, or 3) when dynamic content of interest changes, transporting the dynamic content to the mobile computing device. The only teaching regarding how dynamic information arrives at the mobile computing device is the statement that the “Stock Ticker control needs only to **continually retrieve** the latest stock prices and display them.” [Brim, at 1:48-51 (emphasis added).] The Examiner’s argument concedes that the client computer in Brim “retrieves” the dynamic data from the network computing device. Indeed, the Examiner states that the client computer in Brim “retrieves” dynamic content from the networking computer no less than three times: “The dynamic data is **continuously retrieved** from a remote server . . .,” “. . . not excluding the **continuous retrieval**, and display of dynamic data . . .,” “. . . and efficiently **retrieve** dynamic data onto a client computer.” [11/13/06 Office Action, at p. 7.] Nowhere does the Examiner argue that the network computing device in Brim transports the A client computer “retrieving” dynamic content is the antithesis of the present invention wherein the networking computer monitors and transports the dynamic content to the mobile computing device, as explained below.



*iii. Brim Does Not Teach Denoting Dynamic Content by a Registration as Required by the Claims*

Nothing in Brim teaches denoting dynamic content by a registration as required by the claims. By submitting a registration that denotes dynamic content, a user of the present invention informs the network computing device which dynamic content the user is interested in receiving on the user's mobile computing device. Because the registration informs the network computing device which dynamic content each user desires to receive at his or her respective mobile computing device, the mobile computing device does not need to "retrieve" the dynamic content.

Brim, on the other hand, is a direct contrast to this limitation. In Brim, the user's computing device "continuously retrieves" dynamic content from the network computing device. [See Brim, at 1:36-40.] Because the user's computing device in Brim "continuously retrieves" the dynamic content of interest, it is not necessary for the user in Brim to denote dynamic content of interest at the network computing device via a registration. Consequently, Brim understandably does not teach denoting dynamic content with a registration. The Examiner does not, and indeed can not, cite to any passage in Brim, or to any other reference of record, teaching this limitation. Thus, Brim does not teach denoting dynamic content by a registration, and it is respectfully submitted that the Examiner's rejection for obviousness should be removed.

*iv. Brim Does Not Teach Monitoring Dynamic Content at the Network Computing Device*

Nothing in Brim teaches monitoring dynamic content at the network computing device. In Brim, the client computer "continually retriev[es]" the dynamic content of interest from the

network computing device. [See Brim, at 1:36-40; 11/13/06 Office Action, at p. 7.] Because the user's computing device in Brim "continuously retrieves" the dynamic content without regard to whether the dynamic content has changed, it is not necessary for the network computing device in Brim to monitor the dynamic content. Consequently, Brim understandably does not teach monitoring dynamic content at the network computing device.

v. *Brim Does Not Teach "When Dynamic Content of Interest Changes, the Dynamic Content Is Transported to the Mobile Computing Device"*

Brim does not teach a network computer that monitors dynamic content and transports dynamic content to a mobile computing device when the dynamic content of interest changes. The claims of the present application require the invention to monitor the dynamic content of interest at the network computing device, as explained above. Further, when the network computing device detects a change in the dynamic content, the dynamic content is transported to the mobile computing device. Thus, in the claims the transportation of dynamic content is performed by the network computing device. Consequently, in the present invention, information is communicated in only one direction to update dynamic content—from the network computing device to the mobile computing device.

This contrasts the client computer of Brim that "retrieves" dynamic content from a network computing device. Brim does not teach monitoring dynamic content and therefore it does not teach detecting when a change occurs in the dynamic content. Further, in Brim, information is communicated in two directions to update dynamic content: First, the client computer sends a request to "retrieve" the dynamic content from the network computing device.

Second, the network computing device sends the requested dynamic content back to the client computer. Thus, Brim does not teach the claimed limitations of monitoring the dynamic content at the network computing device, or transporting the dynamic content to the mobile computing device when a change in the dynamic content is detected at the network computing device.

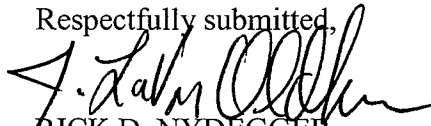
Last, nothing in Brim teaches transporting dynamic content to the mobile computing device “when dynamic content of interest changes.” To the contrary, Brim teaches “*continuously* retrieving” the dynamic content. This teaching of Brim implies that the client computer repeatedly retrieves the dynamic content from the network computing device, regardless of whether the dynamic content has changed. Indeed, dynamic content that does not change frequently, like the score of a Super Bowl that may change only six or seven times during three or four hours, will nonetheless be “continuously retrieved” by Brim during the entire game. Instead of teaching the limitation of transporting dynamic content to the mobile computing device “when dynamic content of interest changes,” Brim teaches the exact opposite of that limitation—“continuously retrieving” the dynamic content. Consequently, the invention claimed in the application is distinguishable over the combination of references cited by the Examiner, and the Examiner’s rejection should respectfully be removed.

### CONCLUSION

Because the Examiner has failed to identify each of the limitations of the claims in the prior art, and because the Examiner’s reliance on Brim is mistaken, Appellant respectfully requests that the Examiner’s rejections of the appealed claims 1-39 and 41-49 be removed, and that claims 1-39 and 41-49 be allowed.

Dated July 20, 2007.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rick D. Nydegger", written over the printed name.

RICK D. NYDEGGER

Registration No. 28,651

J. LAVAR OLDHAM

Registration No. 53,409

Attorneys for Applicant

Customer No. 47973

CN0000000014V001

## CLAIMS APPENDIX

1. (Previously Presented) A method of customizing arrangement of content displayed on a display device of a mobile computing device, the method comprising:

an act of creating a template file at a network computing device, which represents a layout for displaying content at the mobile computing device that is updated automatically and without user intervention, by performing the acts of:

generating static content and layout information corresponding to the static content;

generating one or more references to dynamic content and layout information corresponding to the one or more references to dynamic content, the dynamic content changing over time; and

including the static content, the one or more references to the dynamic content, as well as corresponding layout information in the template file;

an act of generating computer-executable instructions for substituting the dynamic content at the mobile computing device, the substituted dynamic content being stored separate from the template file and substituted for the one or more references to the dynamic content included in the template file;

an act of transferring the template file and the computer-executable instructions to the mobile computing device in order to customize arrangement of the dynamic content at the mobile computing device wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content, wherein the template file, including the layout information is stored at the mobile computing device; and

an act of monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device

where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content.

2. (Original) The method as recited in claim 1, wherein generating static content and layout information corresponding to the static content comprises the following:

an act of generating computer-executable instructions in the form of markup language instructions.

3. (Original) The method as recited in claim 2, wherein generating computer-executable instructions in the form of markup language instructions comprises the following:

an act of generating computer-executable instructions in the form of HTML instructions.

4. (Original) The method as recited in claim 1, wherein generating static content and layout information corresponding to the static content comprises the following:

an act of generating layout information for positioning static content on the display device.

5. (Original) The method as recited in claim 1, wherein generating references to dynamic content and layout information corresponding to the references to dynamic content comprises the following:

an act of generating customized extensions to a computer language, the customized extensions referencing dynamic content.

6. (Original) The method as recited in claim 5, wherein generating customized extensions to a computer language comprises the following:

an act of generating customized extensions to a markup language, the extensions referencing dynamic content.

7. (Original) The method as recited in claim 6, wherein generating customized extensions to a markup language comprises the following:

an act of generating customized macro extensions to a markup language, the customized macro extensions referencing dynamic content.

8. (Original) The method as recited in claim 7, wherein generating customized macro extensions to a markup language comprises the following:

an act of generating customized macro extensions to HTML, the customized macro extensions referencing dynamic content.

9. (Original) The method as recited in claim 8, wherein generating customized macro extensions to HTML comprises the following:

an act of generating customized macro extensions that may cause the display of dynamic content at the display device.

10. (Original) The method as recited in claim 5, wherein generating customized extensions to a computer language comprises the following:

an act of generating customized extensions to a computer language that may, automatically and without user intervention, cause the display of dynamic content at the display device.

11. (Original) The method as recited in claim 5, wherein generating customized extensions to a computer language comprises the following:

an act of generating customized extensions to a script language, the extensions referencing dynamic content.

12. (Original) The method as recited in claim 11, wherein generating customized extensions to a script language, the extensions referencing dynamic content comprises the following:

an act of generating customized extensions to java script, the extensions referencing dynamic content.

13. (Original) The method as recited in claim 1, wherein generating references to dynamic content and layout information corresponding to the references to dynamic content comprises the following:

an act of generating layout information for positioning dynamic content on the display device.

14. (Original) The method as recited in claim 1, wherein generating references to dynamic content and layout information corresponding to the references to dynamic content comprises the following:

an act of generating layout information for ordering dynamic content on the display device.

15. (Original) The method as recited in claim 1, wherein including the static content, the references to the dynamic content, as well as corresponding layout information in a template file comprises the following:

an act of including the static content, the references to dynamic content, as well as corresponding layout information in a template file that is capable of including content of a plurality of different formats.

16. (Original) The method as recited in claim 15, wherein including the static content, the references to dynamic content, as well as corresponding layout information in a



template file that is capable of including content of a plurality of different formats comprises the following:

an act of including the static content, the references to dynamic content, as well as corresponding layout information in a MIME file.

17. (Previously Presented) The method as recited in claim 1, wherein generating computer-executable instructions comprises the following:

an act of generating computer-executable instructions in a markup language for substituting, at the mobile computing device, the dynamic content for the one or more references to the dynamic content.

18. (Previously Presented) The method as recited in claim 17, wherein generating computer-executable instructions in a markup language comprises:

an act of generating computer-executable instructions in HTML.

19. (Previously Presented) The method as recited in claim 18, wherein generating computer-executable instructions in HTML comprises the following:

an act of generating computer-executable instructions that include customized macro extensions to HTML.

20. (Original) The method as recited in claim 1, wherein transferring the template file and the computer-executable instructions to the mobile device comprises the following:

an act of transferring a template file that includes content encoded in a MIME format to the mobile device.

21. (Original) The method as recited in claim 20, wherein transferring a template file that includes content encoded in a MIME format to the mobile device comprises the following:

an act of transferring a template file that includes content encoded in a MIME format to the mobile device using WAP.

22. (Previously Presented) The method as recited in claim 21, wherein transferring a template file that includes content encoded in a MIME format to the mobile device using WAP comprises the following:

an act of transferring a template file, that includes content encoded in a MIME format and that is associated with a specific application id, to the mobile device using WAP.

23. (Original) The method as recited in claim 22, wherein transferring a template file, that includes content encoded in a MIME format and that is associated with a specific application id, to the mobile device using WAP comprises the following:

an act of transferring a template file, that includes content encoded in a MIME format and that is associated with a specific application id that identifies the template file as including content encoded in a MIME format, to the mobile device using WAP.

24. (Original) The method as recited in claim 1, wherein transferring the template file and the computer-executable instructions to the mobile device comprises the following:

an act of transferring a template file and computer-executable instructions that include HTML content.

25. (Original) The method as recited in claim 1, wherein transferring the template file and the computer-executable instructions to the mobile device comprises the following:

an act of transferring the template file and the computer-executable instructions via a transport protocol.

26. (Original) The method as recited in claim 25, wherein transferring the template file and the computer-executable instructions via a transport protocol comprises the following:

an act of transferring the template file and the computer-executable instructions via HyperText Transport Protocol.

27. (Previously Presented) A method for displaying a customized arrangement of content at a mobile computing device, the method comprising:

- an act of receiving, from a network computing device, a template file that includes static content, one or more references to dynamic content, as well as corresponding layout information for the static and dynamic content;

- storing the template file and the layout information;

- an act of receiving, from the network computing device, computer-executable instructions for substituting the dynamic content for the one or more references to the dynamic content included in the template file;

- an act of receiving a notification that dynamic content referenced by at least one of the one or more references to the dynamic content has changed as a result of the network computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content;

- an act of executing computer-executable instructions to substitute the changed dynamic content at the mobile computing device, the changed dynamic content being stored separate from the template file and substituted for the at least one of the one or more references to the dynamic content, based on the notification that the dynamic content referenced by the at least one of the one or more references to the dynamic content has changed, wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

28. (Previously Presented) The method as recited in claim 27, further comprising the following:

an act of storing the template file in system memory associated with the mobile computing device.

29. (Previously Presented) The method as recited in claim 27, wherein receiving a notification that dynamic content referenced by at least one of the one or more references to dynamic content has changed comprises the following:

an act of receiving a notification that was pushed to the mobile device using a wireless protocol.

30. (Original) The method as recited in claim 29, wherein receiving a notification that was pushed to the mobile device using a wireless protocol comprises:

an act of receiving a notification that was pushed to the mobile device using WAP.

31. (Original) The method as recited in claim 30, wherein receiving a notification that was pushed to the mobile device using WAP comprises:

an act of receiving a service indication element that was pushed to the mobile device using WAP.

32. (Original) The method as recited in claim 31, wherein receiving a service indication element that was pushed to the mobile device using WAP comprises the following:

an act of receiving a service indication element that includes a URI.

33. (Original) The method as recited in claim 31, wherein receiving a service indication element that was pushed to the mobile device using WAP comprises the following:

an act of receiving a service indication element, which includes a system indication ID that identifies a reference to dynamic content included in a template file.

34. (Previously Presented) The method as recited in claim 31, wherein receiving a service indication element that was pushed to the mobile device using WAP comprises the following:

an act of receiving a service indication element that includes dynamic content that has changed.

35. (Previously Presented) The method as recited in claim 27, wherein receiving a notification that dynamic content referenced by at least one of the one or more references to dynamic content has changed comprises the following:

an act of receiving a notification via a transport protocol that dynamic content referenced by at least one of the one or more references to dynamic content has changed.

36. (Previously Presented) The method as recited in claim 27, wherein receiving a notification that dynamic content referenced by at least one of the one or more references to dynamic content has changed comprises the following:

an act of receiving a notification, which includes a plurality of dynamic content items associated with a structured data content type, that dynamic content referenced by at least one of the one or more references to dynamic content has changed.

37. (Previously Presented) The method as recited in claim 27, wherein receiving a notification that dynamic content referenced by at least one of the one or more references to dynamic content has changed comprises the following:

an act of storing a notification that was pushed to the mobile device using a wireless protocol.

38. (Previously Presented) The method as recited in claim 27, wherein an act of executing computer-executable instructions comprises the following:

an act of executing markup language instructions.

39. (Previously Presented) The method as recited in claim 38, wherein an act of executing markup language instructions comprises the following:

an act of executing HTML instructions.

40. (Canceled).

41. (Previously Presented) A computer program product comprising one or more computer readable media with computer executable instructions for implementing a method of customizing arrangement of content displayed on a display device of a mobile computing device, the method comprising:

creating a template file at a network computing device, which represents a layout for displaying content at the mobile computing device that is updated automatically and without user intervention, by:

generating static content and layout information corresponding to the static content;

generating one or more references to dynamic content and layout information corresponding to the one or more references to dynamic content, the dynamic content changing over time even if corresponding layout information remains the same;

including the static content, the one or more references to the dynamic content, as well as corresponding layout information in the template file;

generating computer-executable instructions for substituting the dynamic content at the mobile computing device, the substituted dynamic content being stored separate from the template file and substituted for the one or more references to the dynamic content included in the template file; wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

transferring the template file and the computer-executable instructions to the mobile computing device in order to customize arrangement of the dynamic content at the mobile computer device, wherein the template file, including the layout information is stored at the mobile computing device; and

monitoring content denoted in a registration and when dynamic content of interest changes, transporting the dynamic content to the mobile computing device where the



transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content.

42. (Original) The computer program product as recited claim 41, wherein the computer-readable medium is a physical storage media.

43. (Previously Presented) A computer program product comprising one or more computer readable media with computer executable instructions for implementing a method of displaying a customized arrangement of content at a mobile computing device, the method comprising:

receiving, from a network computing device, a template file that includes static content, one or more references to dynamic content, as well as corresponding layout information for the static and dynamic content;

receiving, from the network computing device, computer-executable instructions for substituting the dynamic content for the one or more references to the dynamic content included in the template file;

receiving a notification that dynamic content referenced by at least one of the one or more references to the dynamic content has changed as a result of the network computing device monitoring content denoted in a registration such that when dynamic content of interest changes, the dynamic content is transported to the mobile computing device where the transported dynamic content is merged with the layout information corresponding to the one or more references to dynamic content;

executing computer-executable instructions to substitute the changed dynamic content at the mobile computing device, the changed dynamic content being stored separate from the template file and substituted for the at least one of the one or more references to the dynamic content, based on the notification that the dynamic content referenced by the at least one of the one or more references to the dynamic content has changed, wherein the computer-executable instructions are executed at the mobile computing device to facilitate merging updated displayable dynamic content at the mobile computing device with the layout information corresponding to the one or more references to dynamic content.

44. (Original) The computer program product as recited claim 43, wherein the computer-readable medium is memory included in the mobile computing device.

45. (Previously Presented) A method as recited in claim 1, wherein the method further includes generating at least some dynamic content at the mobile computing device that replaces one or more references provided in the template file.

46. (Previously Presented) A method as recited in claim 1, wherein the method further includes notifying the mobile computing device of changes to the layout information and other dynamic content.

47. (Previously Presented) A method as recited in claim 46, wherein notifying includes providing an audio notification.

48. (Previously Presented) A method as recited in claim 27, wherein the method further includes generating at least some dynamic content at the mobile computing device that replaces one or more references provided in the template file.

49. (Previously Presented) A method as recited in claim 27, wherein the notification includes an audio notification.

## EVIDENCE APPENDIX

Not applicable.

RELATED PROCEEDINGS APPENDIX

Not applicable.